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EXAMINER	
AWAD, AMR A	

ART UNIT	PAPER NUMBER
2675	8

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/976,536	GRIFFIN ET AL.	
	Examiner	Art Unit	
	Amr Awad	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *44-93* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *44-93* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. The references cited in the Information Disclosure Statement filed October 30, 2003 have been considered by the Examiner; see attached PTO-1449.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 44-93 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-48 of U.S. Patent No. 6,278,442 (hereinafter Pat-442) in view of Uchikura (US patent NO. 5,337,346).

By comparing the independent claim with independent claims 1, 15, 39, and 46 of Pat-442; we can see that the claims are fairly similar. For example, claim 1 of both Pat-442 and the present application disclose a hand held dual mode mobile device, including keyboard, display, the positive and negative angles, and the oblong shaped keys in claim 1 of Pat-442 are recited in claims 56 and 57, which makes claim 1 of Pat-

442 substantially similar to claim 60 of the present application, which is dependent from claims 44 and 56. None of the claims in Pat-442 recite having microphone and a speaker wherein the microphone is mounted below the display within the front surface of the device housing and the speaker is mounted above the display within the front surface of the device housing.

However, Uchikura (figures 2-3) teaches a handheld dual-mode mobile (portable phone 1) that includes a keyboard (4), speaker (12 through a hole 17) and microphone (11 through a hole 16) (col. 3, line 57 through col. 4, line 7), and wherein the microphone is mounted below the display (10 through a window 15) within the front surface of the device housing and the speaker is mounted above the display within the front surface of the device housing (figure 3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to realize that the invention described in claim 1 of Pat-442 can be modified to include a speaker and microphone (using Uchikura's teaching) to the device so that the handheld device of claim 1 of Pat-442 can be used as a portable phone and therefore, increasing the versatilities of the device. Similarly with respect the other claims of the present invention.

4. Claims 44-93 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-47 of U.S. Patent No. 6,452,588 (hereinafter Pat-588) in view of Uchikura.

Similar to the rejection above, by comparing the independent claim with independent claims 1, 11, 17, 23-24 and 42 of Pat-588; we can see that the claims are substantially similar. For example claim 1 of Pat-588 and claim 44 of the present application recite a hand-held device that includes a QWERTY keyboard and a display. The positive and negative angles, and the oblong shaped keys in claim 1 of Pat-588 are recited in claims 56 and 57, which makes claim 1 of Pat-588 substantially similar to claim 60 of the present application, which is dependent from claims 44 and 56. None of the claims in Pat-588 recite having microphone and a speaker wherein the microphone is mounted below the display within the front surface of the device housing and the speaker is mounted above the display within the front surface of the device housing.

However, Uchikura (figures 2-3) teaches a handheld dual-mode mobile (portable phone 1) that includes a keyboard (4), speaker (12 through a hole 17) and microphone (11 through a hole 16) (col. 3, line 57 through col. 4, line 7), and wherein the microphone is mounted below the display (10 through a window 15) within the front surface of the device housing and the speaker is mounted above the display within the front surface of the device housing (figure 3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to realize that the invention described in claim 1 of Pat-442 can be modified to include a speaker and microphone (using Uchikura's teaching) to the device so that the handheld device of claim 1 of Pat-588 can be used as a portable phone and therefore, increasing the versatilities of the device. Similarly with respect the other claims of the present invention.

5. Claims 44-93are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-211 of U.S. Patent No. 6,489,950 (hereinafter Pat-950) in view of Uchikura.

The rejection of Pat-588 above, substantially applies to the double patent rejection of Pat-950 in view of Uchikura.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 44-65, 68-69, 75-86 and 91-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchikura in view of Siitonen et al. (US patent NO. 6,049,769; hereinafter referred to as Siitonen). As to independent claim 44, Siitonen.

As to independent claim 44, Uchikura (figures 2-3) teaches a handheld dual-mode mobile (portable phone 1) that includes a single integrated device housing (1) having a front surface and a rear surface and a plurality of side surfaces coupling the front surface to the rear surface (col. 2, line 66 through col. 3, line 4), a wireless transceiver for sending and receiving voice communications (col. 3, line 59 through col. 4, line 3 and also shown as element 26 in figure 26), (keyboard (4), speaker (12 through a hole 17) and microphone (11 through a hole 16) (col. 3, line 57 through col. 4, line 7),

and wherein the microphone is mounted below the display (10 through a window 15) within the front surface of the device housing and the speaker is mounted above the display within the front surface of the device housing (figure 3). Uchikura also teach that the dual mode mobile communication device being operable in either the voice or data mode without reorienting the device (this is clear from figures 1 and 3 of Uchikura's device where the orientation of the device does not change).

Uchikura does not expressly teach that the keyboard is a QWERTY keyboard.

However, it is well known in the art that most of the used full keyboard is QWERTY keyboard. Therefore, it would have obvious to a person of ordinary skill in the art at the time the invention was made to realize that the full keyboard taught by Uchikura has a QWERTY layout because such layout is well known in the art and known to most professional keyboard users, and known to facilitate typing.

Uchikura does not expressly teach having the wireless transceiver for sending and receiving voice communications when in the voice mode of operation and data communications when in the data mode.

However, Siitonen (figures 2A and 2B) teaches dual mode mobile communication device (phone 10a and PDA 10b) that includes QWERTY keyboard (8b), wherein data mode (E-mail or telefax) or voice communication mode (telephone) are used in a wireless network (col. 4, line 63 through col. 5, line 19).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Siitonen having two modes wireless communication to be incorporated to Uchikura's device so as to be able to use

the device in both voice (phone) and text (PDA) which increase the versatility of the device.

As to claims 45 and 84, as can be seen in figure 1 of Uchikura, the device has a front surface and a back surface and having generally rectangular shape.

As to claim 46, Uchikura (figure 3) shows that the device the voice communication interface (speaker 17 and microphone 16) and the data communication interface (keyboard 5) are positioned on the front surface of the device housing.

As to claim 47, as can be seen in figures 1 and 3, Uchikura shows that the device has a plurality of side surfaces connecting the front surface to the back surface, the plurality of side surfaces including a top side and bottom side surface.

As to claim 48, as can be seen from figures 1-3, Uchikura shows that the microphone (16) is mounted within the front surface of the device housing below the keyboard, and the display (15) and the speaker (17) are positioned on the front surface of the device.

As to claim 49, Uchikura shows that the microphone (16) below the QWERTY keyboard.

As to claims 50-51, Uchikura (figure 3) teaches that the speaker (17), QWERTY keyboard (5) and the microphone (16) are each aligned along a vertical reference line through the device housing and wherein the microphone and the speaker are offset from the vertical line.

As to claim 52, Uchikura shows that the device has a rectangular display (15).

As to claims 53-55, Uchikura does not expressly show that the keyboard includes a plurality of letter keys, a plurality of function keys, a space bar key, a backspace key, delete key, NUM lock key and a CAP lick key. However, Siitonen (figure 2B) teaches a QWERTY keyboard that includes all the features of claims 53-55. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Siitonen to be included to Uchikura, so as to give the user the normal and the convenience feeling of a full keyboard on a small device, which make the device user friendly.

As to claim 56, figure 2B of Siitonen reference fairly reads on the claimed limitations of claim 56.

As to claims 57-59, the claim is broad enough because the shape of the keys are not claimed; rather the broad interpretation of the claim is that the location of keys having a negative angle and positive angle with respect the vertical reference line. Such limitation is fairly taught by fig 2B of Siitonen.

As to claim 60, the term "oblong" can be simply translated as " Having the shape of or resembling a rectangle or an ellipse". Therefor, the shape of the keys in figure 2B of Siitonen fairly reads on the limitation of "oblong shaped".

As to claims 61-63, the shape of the keys in Siitonen's figure 2B can be consider as oval like shape, rectangular like shape or diamond shape.

As to claim 64, by comparing figure 2 of the present invention and figure 2B of Siitonen; we can see that the rows of the keyboard, which includes the alphabet letters, are 3 in both figures.

As claim 68, as can be seen in figure 2B, Siitonen shows that keys are symmetrically shaped.

As to claim 69, Uchikura (figure 3) shows that the keys are square shaped.

As to claim 78, Siitonen (figure 1) shows telephone connection (10a) and data input means (8b) (col. 4, lines 26-46), which fairly reads on the cited limitations of the claim. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Siitonen so as to increase the versatility of the device.

As to claim 75, Uchikura (figure 4) teaches a microprocessor (27) coupled to the transceiver (26), the keyboard (28), the microphone and the speaker, for controlling the operation of the device (col. 4, line 14 through col. 5, line 14).

As to claims 76-77, Uchikura (figure 4) teaches a memory (RAM 31) for storing operating system and one or more application programs that are executed by the microprocessor (27), the one or more programs including at least a voice communication module and data communication module, and a personal information manager application (col. 4, line 14 through col. 5, line 14).

As to claim 79, Uchikura (figure 4) teaches an antenna (22) coupled to the transceiver (26) for communicating with the transmitter and the receiver (col. 4, lines 14-22).

As to claim 80, Uchikura teaches using RF communication (col. 3, lines 45-56).

As to claim 83, Uchikura teaches storing user information in the device (see figure 5 and col. 5, line 51 through col. 6, line 9).

As to claim 81, Uchikura teaches wireless voice network and wireless data network (abstract and col. 4, lines 38-46).

As to claim 82, the choice of GSM voice network and data network GPRS is simply well known in the art and would be obvious to use based on the required device.

As to claim 85, Uchikura shows that the speaker, the display, the keyboard and the microphone are mounted within the front surface of the device housing (figure 3A).

As to claim 86, the claim is broad enough to read on figure 2B of Siitonen's reference.

As to claims 91-93, as can be seen in figures 1 and 2, Uchikura shows that the housing is formed using two housing (bottom and top in figure 2), and wherein the two housing sections include a plurality of fasteners (where the two sections are connected), and a single circuit board (the bottom section where all the parts of the phone in figure 4 is located).

8. Claim 71 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchikura and Siitonen in view of Aldridge et al. (US patent NO. 6,047,047; hereinafter referred to as Aldridge).

As can be seen above, Uchikura and Siitonen teach all the limitation of claim 71 except the citation of serial port. However, Aldridge (figure 1) teaches a handheld device (30) which includes a serial port (30) (col. 4, lines 28-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a serial port to Uchikura's device so as to

facilitate the communication to other devices and therefore, increase the versatilities of the device.

9. Claims 65-67, 70 and 72-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchikura and Siitonen in view of Grant (US patent NO. 5,500,643 provided by the Applicant).

As to claims 65-67, as can be seen above, Uchikura and Siitonen teach all the limitations of claims 65-67 except the citation of having the keys configured along an arc across the front surface of the device housing.

However, Grant (FIGS. 1-2) shows an input device (10) wherein the keys are configured along an arc across the front surface, and shaped and convex or concave.

Therefor, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Grant having the keys configured in a arc shape to be included in Uchikura's device so as motivated by Grant, to eliminate ulnar-deviation of the actuating hand (abstract).

As to claim 70, as can be seen in figure 1, of Grant's device shows that the keys having circular shape.

As to claims 72-73, as can be seen in figure 1, Grant shows an auxiliary input/output (46) as a thumbwheel (col. 3, lines 64-65).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Grant having a thumbwheel to Uchikura's device so as to simplify inputting data.

As to claim 74, the LED input/output is broad enough that the LED would have been part of the input/output device which as well known to be existed in the QWERTY keyboard.

As to claims 87-88, directed to thumbwheel, which as can be seen above, taught by Grant. Having the thumbwheel in the side or front surface would be obvious to a person of ordinary skill in the art, based on the design of the device and the required characteristics.

10. Claim 89 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchikura and Siitonen in view of Cairns (US patent NO. 5,930,703).

As can be seen above, Uchikura and Siitonen teach all the limitations of claim 89 except the citation of having infrared data port for wireless transmitting and receiving data with another mobile communication device.

However, Cairns (figure 4) teaches a cellular phone for communicating with other similar cellular phone using infrared wireless communication (col. 6, lines 47-65).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use infrared wireless communication in Uchikura's phone, because wireless communication uses many types of communication technology such as radio, acoustic or infrared based on the design choice. Furthermore, infrared is known for its affordability and reliability.

11. Claim 90 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchikura and Siitonen in view of Jarrad (US patent NO. 6,047,197).

As can be seen above, Uchikura and Siitonen teach all the limitation of claim 90 except the citation of having a mode key to switch the device between the operation modes.

However, Jarrad a phone device that includes a key mode for changing between the modes (col. 3, lines 41-65).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Jarrad having a toggle switch to change between modes to be incorporated to Uchikura's device so as to facilitate the switching between the modes, which make the device user friendly.

Response to Arguments

12. Applicant's arguments with respect to claims 44-93 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amr Awad whose telephone number is (703)308-8485. The examiner can normally be reached on Monday-Friday, between 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras can be reached on (703)305-9720. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4750.

Amr Ahmed Awad

A.A.
January 23, 2004